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COMMISSION STAFF WORKING DOCUMENT

Summary of the Impact Assessment

Accompanying the document

Communication

An EU Strategy on adaptation to climate change

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1. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

The EU Adaptation Strategy is included in the Commission Work Programme 2013¹. It builds on the White Paper "Adapting to climate change: Towards a European framework for action"². Directorate General Climate Action drafted the Impact Assessment. It benefited from the recommendations of the Impact Assessment Board.

The preparation of the report included consultation with the Adaptation Steering Group, composed of representatives from Member States and stakeholders, an online public consultation, and various workshops organised with Member States and stakeholders.

Overall, stakeholders were supportive of additional EU-promoted action on adaptation, while acknowledging that most climate change impacts are to be addressed at local level. Mainstreaming adaptation into key EU initiatives is seen by all as a priority, as well as providing the right framework, information tools, and EU funds that allow for the effective integration of adaptation issues at all levels of government. Some Member States would oppose an EU legislative instrument for promoting the adoption of national adaptation strategies.

2. PROBLEM DEFINITION, POLICY CONTEXT AND SUBSIDIARITY

2.1. Setting the scene

Even if all greenhouse-gas emissions were to stop today, we would still see major changes in the climate. We therefore have no choice but to deal with unavoidable climate impacts and their economic, environmental and social costs. Early action will save on damage costs later.

Managing the risks of climate change implies **coupling mitigation efforts with adaptation**, since the results of today's mitigation efforts will determine the degree of adaptation required in the future. At the same time, reaching levels of adverse impacts that will be impossible to address through adaptation must be prevented through mitigation.

Climate change adaptation is a horizontal issue, affecting all economic sectors, environmental systems and citizens, to varying degrees. Because of Europe's diversity, **climate impacts and vulnerabilities vary from region to region** and are also very specific to the local situations.

¹ COM(2012) 629 final Vol. 2/2

² COM(2009) 147 final

2.2. Policy context

The 2009 White Paper on adaptation included 33 actions. Most actions have now been implemented. Further efforts are needed to address **knowledge gaps** and on **mainstreaming**, where adaptation needs to be reinforced into key EU policies.

By January 2013, 15 EU Member States have adopted an adaptation policy (strategy and/or plan). Although these strategies and action plans are undoubtedly a good starting point for adaptation action, they are often not operationalised or only partly so.

The 2011 Commission proposal for the next **Multiannual Financial Framework (MFF) 2014-2020** recognises mainstreaming as the MFF's favoured approach to facilitate the necessary contribution to a low-carbon and climate resilient economy³.

2.3. What are the specific problems and added value of EU action

There is a possibility to step up the EU's adaptation action by tackling the following issues:

The EU can help inform decisions about adaptation at all levels by bringing added-value and economies of scale in filling knowledge gaps and sharing knowledge.

The EU can support national and/or regional level action on adaptation to cover the whole of the EU territory.

Finally, the EU has a responsibility to integrate adaptation into its own policies and financial programmes.

3. OBJECTIVES

- The general aim of the EU Adaptation Strategy is to contribute effectively to a more climate resilient Europe. Particular attention is given to transboundary issues and sectors that are closely integrated at EU level through common policies. This means meeting the following specific objectives.

Better informed decision making: the EU Adaptation Strategy should further the understanding of adaptation, improve and widen the knowledge base and enhance dissemination of adaptation-related information.

Operational objective 1a: by 2020, priority knowledge gaps identified in 2013 have been closed.

Operational objective 1b: by 2020, communication tools allow for available information on climate change adaptation to be more easily accessible for decision-makers, including Member States, local authorities and firms.

Increasing the resilience of the EU territory: the EU Adaptation Strategy should promote adaptation action at sub-EU level, and support and facilitate exchange and coordination. In doing so, the Strategy should address cross-border climate impacts and adaptation measures.

Operational objective 2a: by 2017, all Member States have adopted (an) Adaptation Strateg(y)ies, complemented by regional or local adaptation strategies when appropriate.

Operational objective 2b: by 2020, cities of more than 150,000 inhabitants have adopted an adaptation strategy.

³ http://ec.europa.eu/budget/reform/commission-proposals-for-the-multiannual-financial-framework-2014-2020/index_en.htm

Increasing the resilience of key vulnerable sectors: The EU Adaptation Strategy should develop initiatives for a consistent and comprehensive integration of climate change adaptation considerations into sectors closely integrated at EU level via common policies.

Operational objective 3a: by 2020, adaptation considerations have been mainstreamed in a consistent and comprehensive way in key EU policies.

Operational objective 3b: by 2020, new major infrastructure investments are climate-proofed.

4. POLICY OPTIONS

The policy options cover a wide array of potential intervention tools, from **soft measures to legislation, and including direct intervention.**

Table 1: List of options considered for this IA report

Problem	Drivers	Specific objective	Operational objective	Options		
				Providing information and guidelines	Direct intervention	Regulatory approach
Knowledge and access to information gaps	Uncoordinated research activities	Better INFORMED decision-making	By 2020, the priority KNOWLEDGE GAPS identified in 2013 have been closed	1A: Developing a common climate vulnerability assessment in the EU	1B: Developing a knowledge gap strategy	
	Incomplete instruments for knowledge dissemination		By 2020, COMMUNICATION TOOLS allow for available information on climate change adaptation to be accessible for decision-makers	1C: Improving climate-ADAPT beyond business-as-usual;	1D: Supporting exchange between science and policy in the field of adaptation	1E: Proposing the mandatory setup of national information platforms on adaptation
Gaps in adaptation action at sub-EU level	Knowledge, financial, and political reluctance barriers	Increasing the resilience of THE EU TERRITORY	By 2017, all Member STATES have adopted an Adaptation Strategy;	2A: Guidelines for developing national adaptation strategies	2B: Using Life+ funding for supporting the preparation of adaptation strategies and for lighthouse projects on adaptation	2C: Commission's proposal on the adoption of national adaptation strategies. Three sub-options: i/ non-legal; ii/ legislation later; iii/ legislation now
	Absence of considerations for cross-border impacts		By 2020, major CITIES and REGIONS have adopted an Adaptation Strategy	2D: Supporting UNISDR "Making Cities Resilient" campaign among EU cities	2E: Inclusion of adaptation into the Covenant of Mayors Framework	
Gaps in adaptation uptake in key sectors	Incomplete and Inconsistent mainstreaming	Increasing the resilience of key VULNERABLE SECTORS	By 2020, a comprehensive and consistent MAINSTREAMING of adaptation in EU policies is achieved	3A: Guidelines on how to climate proof Cohesion Policy and the Common Agricultural Policy	3B: Listing mainstreaming priorities in EU policies and engaging with key stakeholders	3C: Setting new calendar for revision of key EU legislation as part of the mainstreaming exercise;
	Financial and information barriers to resilient investment and business decisions		By 2020, major INFRASTRUCTURE investments are climate-proofed	3D: Guidelines for project developers for climate proofing vulnerable investments	3E: Promote inclusion of climate change adaptation considerations in relevant infrastructure standards	3F: Proposal on mandatory requirements for climate resilience of infrastructure projects

5. ANALYSIS OF IMPACTS AND COMPARISON OF OPTIONS

5.1. Options included in the preferred policy package are presented in **italic**.

5.2. Options on promoting better-informed decision making

Option 1A – developing only a common climate vulnerability assessment would not allow to benefit from the wealth of approaches and methodologies currently available, and would not be adequate for specific circumstances.

Option 1B – adopting a knowledge gap strategy entails working with stakeholders to identify adaptation research priorities for the next seven years. It will strengthen knowledge generation, in particular in relation to existing policy needs expressed at national and sectoral level. It allows for a better streamlining of existing funds.

Option 1C – Promoting interactions between Climate-ADAPT and other databases contributes to better decision-making by ensuring the dissemination of information, specifically targeting improved data management and the integration of data and services. Efficiency gains are expected for final users, who can benefit from a "one-stop-shop" as Climate-ADAPT becomes the focal point on adaptation information in Europe.

Option 1D – supporting exchange between science and policy makers helps improve knowledge dissemination. It allows a very direct exchange between Member States, the Commission and stakeholders, which can increase capacity-building and contribute to a better understanding of adaptation.

Option 1E – mandatory national adaptation portals, would only have limited impacts compared to business as usual.

5.3. Options on promoting adaptation at sub-EU level

Cost savings for each Member State are expected by providing in *Option 2A – EU guidelines for adaptation policies* various tools and information sources on all issues to be addressed to prepare adaptation strategies. Preventive response actions will increase coping capacity and reduce potential damage costs. Yet the guidelines by themselves will not address all the barriers to effective adaptation, such as the financial constraints faced by Member States or regional authorities in developing adaptation strategies.

Option 2B – Using Life+ will directly contribute to additional adaptation action by facilitating experience transfer between Member States and supporting adaptation strategies. Moreover, this option also ensures better informed decision-making by identifying and supporting relevant cross-sectoral and cross-border lighthouse projects.

The effectiveness, efficiency, and coherence of the three approaches under *Option 2C – Commission's proposal on the adoption of adaptation strategies* – no legal requirement, legislation later, and legislation now – must be considered in conjunction with the implementation of option 2A – guidelines and option 2B – presented above.

The non-legal approach is a continuation of the approach presented in the 2009 White Paper. Its additional effectiveness is expected to be small.

Legislation later will give Member States the opportunity to make use of the guidelines and of LIFE+ funding in designing their adaptation strategy while providing political impetus for adaptation action, in particular to speed up the process in those Member States that are currently undertaking adaptation action. The risk is that for those Member States inactive on adaptation, the political incentive would be insufficient to undertake adaptation action now.

Combining a legislative proposal now with the adoption of the guidelines and the availability of Life+ funding opportunities could increase the likelihood that all Member States have developed an adaptation strategy by 2017. However, some Member States have expressed their opposition to the use of a legal instrument, arguing that legislative approaches would be premature, given that many of them are already developing work programmes and putting in place domestic action.

Option 2D – promoting the UNISDR cities resilience campaign is deemed as of lower effectiveness in fostering adaptation activities across all cities in the EU than **Option 2E – inclusion of adaptation in the Covenant of Mayors framework**. The latter will contribute to increasing resilience at local level, looking for synergies with mitigation objectives. The effectiveness of the Covenant of Mayors' initiative has already been established when it comes to greenhouse gas mitigation commitments.

5.4. Options on promoting adaptation in key sectors

Option 3A – guidance on how to climate proof CAP and Cohesion Policy will facilitate the integration of climate change adaptation considerations into operational and rural development programmes and projects, in line with the Commission's proposals for the next MFF. It will help increase the resilience of key vulnerable sectors, such as agriculture, forestry, energy, transport and construction. To be fully effective, this approach must be complemented by additional efforts both by managing authorities at regional or local level and by the Commission to increase capacity building.

Option 3B – listing mainstreaming priorities and engaging with stakeholders helps identify the areas and sectors where further mainstreaming is needed, such as health, energy, transport, insurance, infrastructure, fisheries, trade, tourism, education and social policies. Increased engagement with the financial and insurance sectors will raise awareness of adaptation and help communicate adaptation-related information.

A **new calendar for revision of some key EU legislation, option 3C**, may be difficult to carry out given its political nature. Moreover, as highlighted by the developments in water policy in the EU, voluntary action can pre-empt the need for legislation to be revised at an earlier stage.

– **Option 3D – guidelines for project developers, and 3E – including adaptation considerations in design standards**, are important first steps for increasing the resilience of key infrastructure investments. Mainstreaming climate change into CEN-CENELEC standards will only bring effective impacts if standards are finally amended to reflect the potential impacts from climate change. This will require time and further interactions with stakeholders in the impacted sectors. The uncertainty in climate modelling and potential lack of data/information on climate impacts for specific project sites makes **option 3E – mandatory approach**, difficult to apply in practice.

6. DISCUSSION

Adaptation needs input from R&D programmes and it needs it already now, to face the current impacts of climate change, but also to plan and make decisions for the short and medium term. Additional efforts to promote coordination for **knowledge generation and dissemination** (options 1B and 1D) will greatly increase the efficiency in the use of EU funds made available for research on climate change adaptation. It will close knowledge gaps faster and facilitate decision making. By implementing option 1C, **Climate-ADAPT** will become the main source of information on adaptation in Europe. Adaptation decisions will be sounder, with a positive impact on the resilience of economic, social and environmental systems.

Providing support tools for developing **adaptation strategies in all Member States** means that the most basic tools needed to enhance Europe's resilience are available, that a minimum assessment of risks and vulnerabilities is undertaken and adaptation actions planned for the whole EU territory. Acceptability issues would hamper the selection of a legislative proposal now. Still, the **combination of guidelines** (option 2A) and **Life+ funding opportunities** (option 2B) can provide the necessary support to Member States willing to act on climate change adaptation, in particular those who already started to develop their adaptation framework. The reviewing phase of the Adaptation Strategy will help decide whether a legislative instrument should be used to facilitate compliance with overall objectives of the EU Adaptation Strategy. The EU will also support local and regional action and will facilitate experience transfer and the uptake of innovative solutions via cross-border and cross sectoral demonstration projects, in particular in the most vulnerable areas and sectors. The key roles that cities must play in climate change adaptation is also highlighted and the **EU will contribute to promote and facilitate adaptation at local level** (option 2D).

By 2020, all relevant EU policies that will have been revised will include climate change adaptation considerations, and the Commission will engage with key stakeholders to ensure that even without revision, considerations on **adaptation is mainstreamed (option 3B)**. Moreover, **EU funds will promote climate resilient investments**, in particular in the area of agriculture, energy, transport, and buildings infrastructure (options 3D and 3E), contributing to a sustainable and resilient EU economy (option 3A). Further interactions with the insurance and financial sectors will lead to more efficient market functioning, increasing the adaptive capacity of EU firms.

7. MONITORING AND EVALUATION

A review of the EU Adaptation Strategy is scheduled by 2018, assessing whether additional actions will be needed to meet the objectives of the Strategy.